



VOLLEYBALL PLAYERS' SKILL OUTPUT IN RESPONSE TO PLYOMETRIC TRAINING

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ABSTRACT

The reasoning of this examination was to investigate the volleyball players' skill output in response to plyometric training. To accomplish this reason for the investigation thirty school level young men volleyball players were chosen from St. Britto Hr. Sec. School, Madurai, Tamilnadu, India were randomly chosen as subjects. Their age ran in the middle of 13 and 16 years. The subjects were isolated into two groups specifically plyometric group and control group. The plyometric group was exposed to plyometric preparing (for week by week three days monday, wednesday, friday) at evening meeting for about six weeks. Spiking, Service and Passing was chosen as reliant variable. After the assortment of fitting information, it was genuinely examined by utilizing paired't' test. The degree of importance was set at 0.05. The consequence of the current examination showed that the plyometric preparing has huge enhancement for spiking, administration and passing capacity of volleyball players.

KEYWORDS: *Plyometric Training, Skill Performance Variables, Volleyball Players.*

INTRODUCTION

Plyometric (otherwise called "ploys") is a sort of activity preparing intended to deliver quick, incredible developments, and improve the elements of the sensory system, by and large to improve execution in sports. Plyometric developments, in which a muscle is stacked and afterward contracted in quick arrangement, utilize the strength, flexibility and innervations of muscle and encompassing tissues to 23 bounce higher, run quicker, toss further, or hit more enthusiastically, contingent upon the ideal preparing objective. Plyometric is utilized to speed up or power of solid constrictions, giving touchiness to an assortment of game explicit exercises. Plyometric has been appeared across the writing to be useful to an assortment of competitors. Advantages range from injury anticipation, power improvement and run execution among others. Plyometric practice alludes to those exercises that empower a muscle to arrive at maximal power in the briefest conceivable time. "Plyometric" is a mix of Greek words that in a real sense intends to expand estimation plyometric practice is a speedy, incredible development utilizing a pre-stretch or counter development, which includes the stretch-shortening cycle (SSC). The reason for plyometric practice is to build the force of resulting

developments by utilizing both the normal flexible parts of muscle and ligament and the stretch reflex. To successfully utilize plyometric as a feature of a preparation program, it is essential to get: (1) the mechanics and physiology of plyometric work out, (2) standards of plyometric program plan and (3) strategies for securely and adequately performing explicit plyometric works out. Plyometric include power hopping, dull jumping and fast power creation. At the point when your muscles unpredictably contract, or abbreviate, at that point quickly extend and protract, they produce maximal force ideal for athletic circumstances. It is a quick development that occurs over a brief period. Plyometric are ideal for competitors or individuals hoping to improve strong force, speed and strength (Baechle, 2008).

Volleyball is a group activity where two groups of six players are isolated by a net. Each group attempts to score focuses by establishing a ball in the other group's court under coordinated guidelines. It has been a piece of the authority program of the Summer Olympic Games since 1964. The total standards are broad. Be that as it may, just, play continues as follows: a player in one of the groups starts a 'rally' by serving the ball (throwing or delivering it and afterward hitting it with a hand or



arm), from behind the back limit line of the court, over the net, and into the accepting group's court. As volleyball match-up includes a greater amount of expertise execution. Which construct the parts for the game, as an exploration researcher extraordinary arranged plyometric preparing program for the school level young men volleyball players (Holyoke, 1985).

METHODOLOGY

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men volleyball players were chosen from St.Britto Hr. Sec. School, Madurai, Tamilnadu, India were randomly chosen as subjects. Their age ran in the middle of 13 and 16 years. The subjects were isolated into two groups specifically plyometric group and control group. The plyometric group was exposed to plyometric preparing (for week by week three days monday, wednesday, friday) at evening meeting for about six weeks. Spiking, Service and Passing was chosen as reliant variable. After the assortment of fitting information, it was genuinely examined by utilizing paired't' test. The degree of importance was set at 0.05.

Table-I
Criterion Measures
Skill Performance Variables

Variables	Test Items	Unit of Measurement
Spiking	Helman Volleyball Test (Wall Spike Test)	Points
Service	Russell Lange Volleyball Test (Serving Test)	Points
Passing	Helman Volleyball Test (Wall Pass Test)	Points

TRAINING PROTOCOL

For plyometric group went through their preparation program as three days out of each week for about six weeks. Preparing was given in the evening meeting. The instructional course incorporates warm up and cool down. Consistently the exercise went on for 45 to an hour roughly. The

subjects went through their preparation programs according to the time tables; for example, side to side lower leg bounces, twofold leg jumps, split hops, sidelong cone jumps and single leg bouncing under the severe management of the examiner. During test period control bunch didn't take an interest in any of the unique preparing.

RESULTS

Table-II
Comparison of Mean, and't'-Values of Skill Performance Variables between Pre & Post Test among Plyometric and Control Groups

S. No	Performance variables	Groups	Test	Mean	't' Values
1.	Spiking	Plyometric group	Pre Test	21.86	10.42*
			Post Test	25.60	
		Control group	Pre Test	19.13	1.32
			Post Test	21.26	
2.	Service	Plyometric group	Pre Test	31.60	13.46*
			Post Test	39.53	
		Control group	Pre Test	30.46	0.18
			Post Test	30.53	
3.	Passing	Plyometric group	Pre Test	20.73	11.21*
			Post Test	25.06	
		Control group	Pre Test	19.53	0.64
			Post Test	19.33	

*Significant at 0.05 level of confidence



Table-II reveals that the obtained mean values of pre test and post test of plyometric group for spiking, service and passing were 21.86 and 25.60, 31.60 and 39.53, 20.73 and 25.06 respectively; the obtained 't' ratio were 10.42*, 13.46* and 11.21* respectively. The tabulated 't' value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was greater than the table value. It is found to be significant change in spiking, service and passing of the volleyball players. The obtained mean values of pre test and post test scores of control

group were 19.13 and 21.26, 30.46 and 30.53, 19.53 and 19.33 respectively, the obtained 't' ratio was 1.32, 0.18 and 0.64. The required table value is 2.14 at 0.05 level of confidence for the degree of freedom 14. The calculated 't' ratio was lesser than the table value. It is found to be insignificant changes in spiking, service and passing of the volleyball players. The mean values of skill performance variables among plyometric group and control group are graphically represented in figure-1.

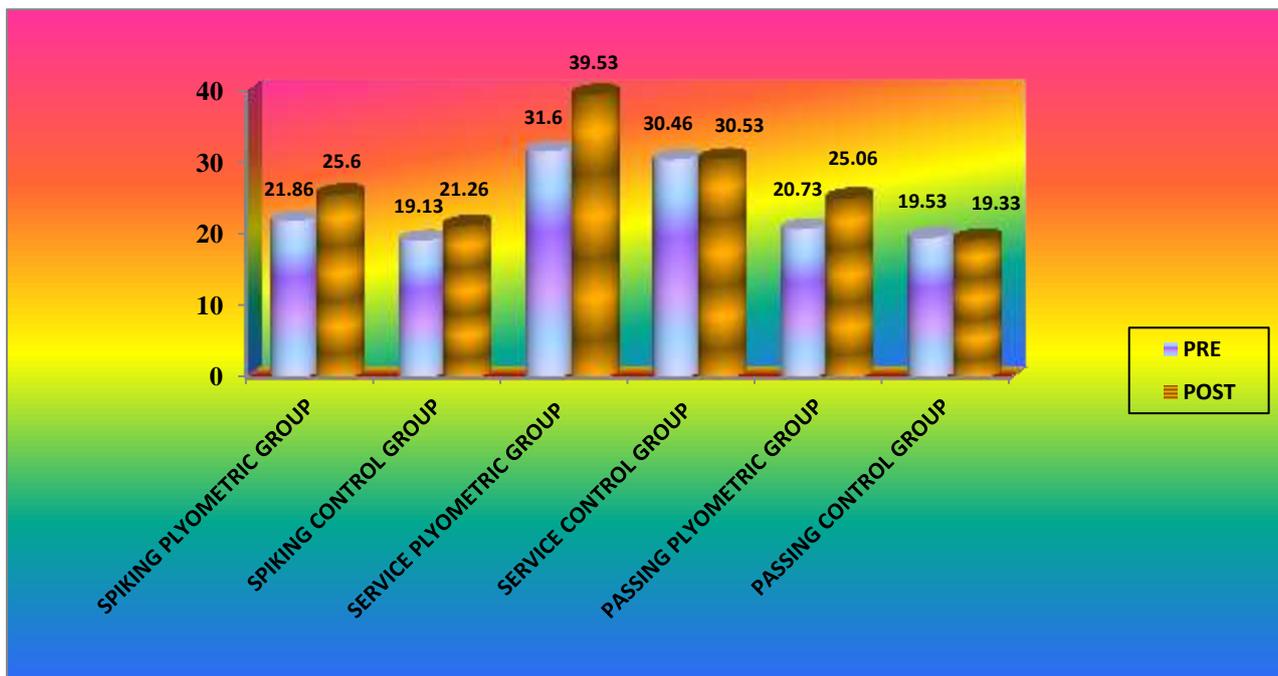


Figure-1: Bar Diagram Showing the Pre Test and Post Test on Skill Performance Variables of Plyometric and Control Groups

DISCUSSION ON FINDINGS

The results of the study indicated that the skill performances variables such as spiking, passing and service were improved significantly after undergoing plyometric training. The changes in the selected parameters were attributed the proper planning, preparation and execution of the training package given to the players. The findings of the present study had similarity with the findings of Annadurai (2014), S Senthil kumaran (2018), Veeramani (2015), The results of the present study indicates that the plyometric training methods is appropriate protocol to improve spiking, passing and service of school level boys volleyball players. From the result of the present study it is very clear that the skill performances variables such as spiking, passing and service improvement significantly due to plyometric training.

CONCLUSION

Based on the findings and within the limitation of the study

1. It was noticed that practice of plyometric training helped to improve skill performance variables of school level boys volleyball players.
2. It was also seen that there is progressive improvement in the selected criterion variables of experimental group of school level boys volleyball players after six weeks of plyometric training programme.
3. Further, it also helps to improve skill performance variables spiking, service and passing.



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